

# ASHP BEST PRACTICES AWARD

## Success of an Expedited Pharmacy Technician Training Program To Augment the Workforce Needs of an Institution

Tyler A. Vest, Pharm.D., M.S., BCPS, BCSCP, FNCAP  
Matthew J. Kelm, Pharm.D., M.H.A.  
Madison L. Hooker, Pharm.D.  
Shanreika R. Breeze, CPhT  
Kuldip R. Patel, Pharm.D., FASHP

Duke University Hospital  
Durham, North Carolina



Authors of this presentation disclose the following relationships with commercial interests related to the subject of this poster:

Tyler Vest: Nothing to disclose  
Matthew Kelm: Nothing to disclose  
Madison Hooker: Nothing to disclose  
Shanreika Breeze: Nothing to disclose  
Kuldip Patel: Nothing to disclose



### Introduction

#### Duke University Health System (DUHS)

- Founded in 1930
- 23,462 employees
- Not-for profit health system
- 1,552 inpatient beds
- Three Hospitals
  - Duke University Hospital (DUH)
  - Duke Regional Hospital (DRH)
  - Duke Raleigh Hospital (DRAH)
- Duke HomeCare and Hospice
- Many ambulatory clinic locations
- Level 1 trauma center
- NCI designated cancer center



#### Pharmacy Services

- Robust service lines across specialty areas
- Over 500 FTE department
  - 269 Pharmacists
  - 246 Pharmacy Technicians
  - 21 Pharmacy Residents
- Over 25 pharmacy locations across acute and ambulatory care

#### Purpose

- Currently 419,300 pharmacy technician positions available with a 4% forecasted growth from 2020-2030<sup>1</sup>
- Literature well documents the critical role of pharmacy technicians and the importance of competence<sup>2-6</sup>
- A recent American Society of Health-System Pharmacists (ASHP) report described significant turnover<sup>7</sup>
- A pharmacy technician training program is a solution<sup>8-12</sup>
- Uniform education is still needed<sup>13-16</sup>
- Influenced organization to start program in 2018

### Description of the Program

#### Program Goals

- Produce graduates well equipped and eligible for certification by the Pharmacy Technician Certification Board (PTCB)
- Recruit candidates that will positively represent the program and excel academically
- Prepare students for employment with our health system
- Develop a consistent source of well-trained technicians to meet the needs of the health system
- Provide a superior level of clinical training to technician students at an affordable price

#### Structure

- Began with business plan
- Seeking candidates interested in health system pharmacy
- Goal to run cost neutral
- Digital content provider partnership allows for significant infrastructure
- Program meets the ASHP/ACPE entry level accreditation standard of 400 hours
- Program runs 11 weeks
- Three cohorts annually (January, April, and August)
- Internal and external applicant base

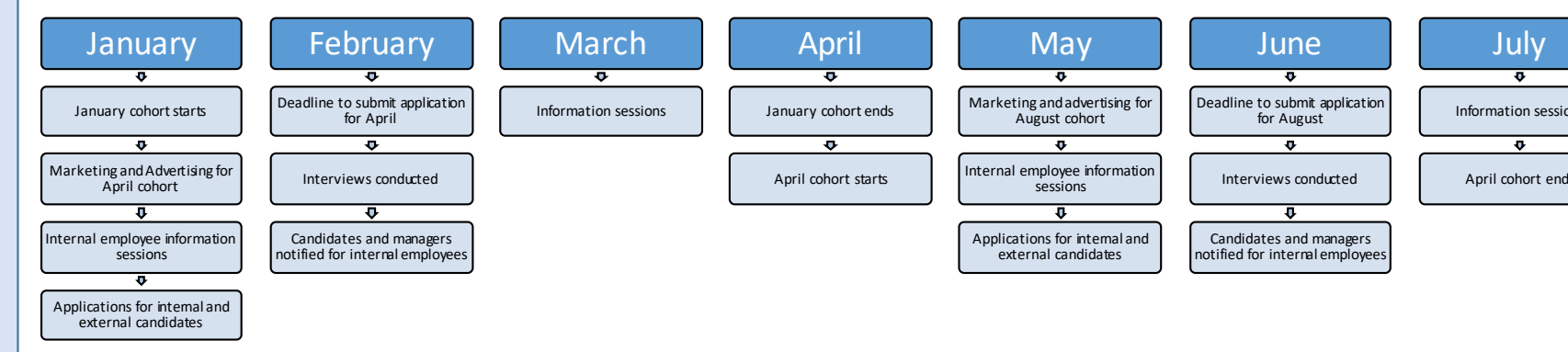
#### Curriculum

- Didactic provided by digital content provider
- Pace at 40 hours of content per week
- On-site and remote simulations
- Two 111 hour blocks of experiential learning in acute and ambulatory care
- Vendor accelerated time to launch and content updates
- Program is supported by a pharmacy leader as director and pharmacy technician coordinator

#### Implementation

- Launches to meet the current and future demands of pharmacy technicians at our institution
- Partnership with Human Resources and Communications Departments to overcome challenges
- Program offered at over 15 sites in our department
- Time dedicated to both teaching and planning phases of the program.

Figure 1: Snapshot of Program and Planning Timeline:



### Experience with the Program

#### Accreditation

- April 2022: 11 cohorts with 41 graduates
- Entry level of 400 hours
- Full six year accreditation in initial review

#### Pass Rates

- 93% graduation rate
- 88% PTCB pass rate

#### Job Placement

- 88% of graduates employed in the health system
- Placement of well trained pharmacy technicians supports an expanding scope of the pharmacist
- Internal applicants are able to stay in their current role at a reduced capacity and shift time to focus on the program

#### Experience

- Innovative technology allows for modified level of employment and increased participation
- All students meet expectations in experiential learning
- All instructors are evaluated as favorable

#### Retention

- 90% program retention compared to 31% department retention

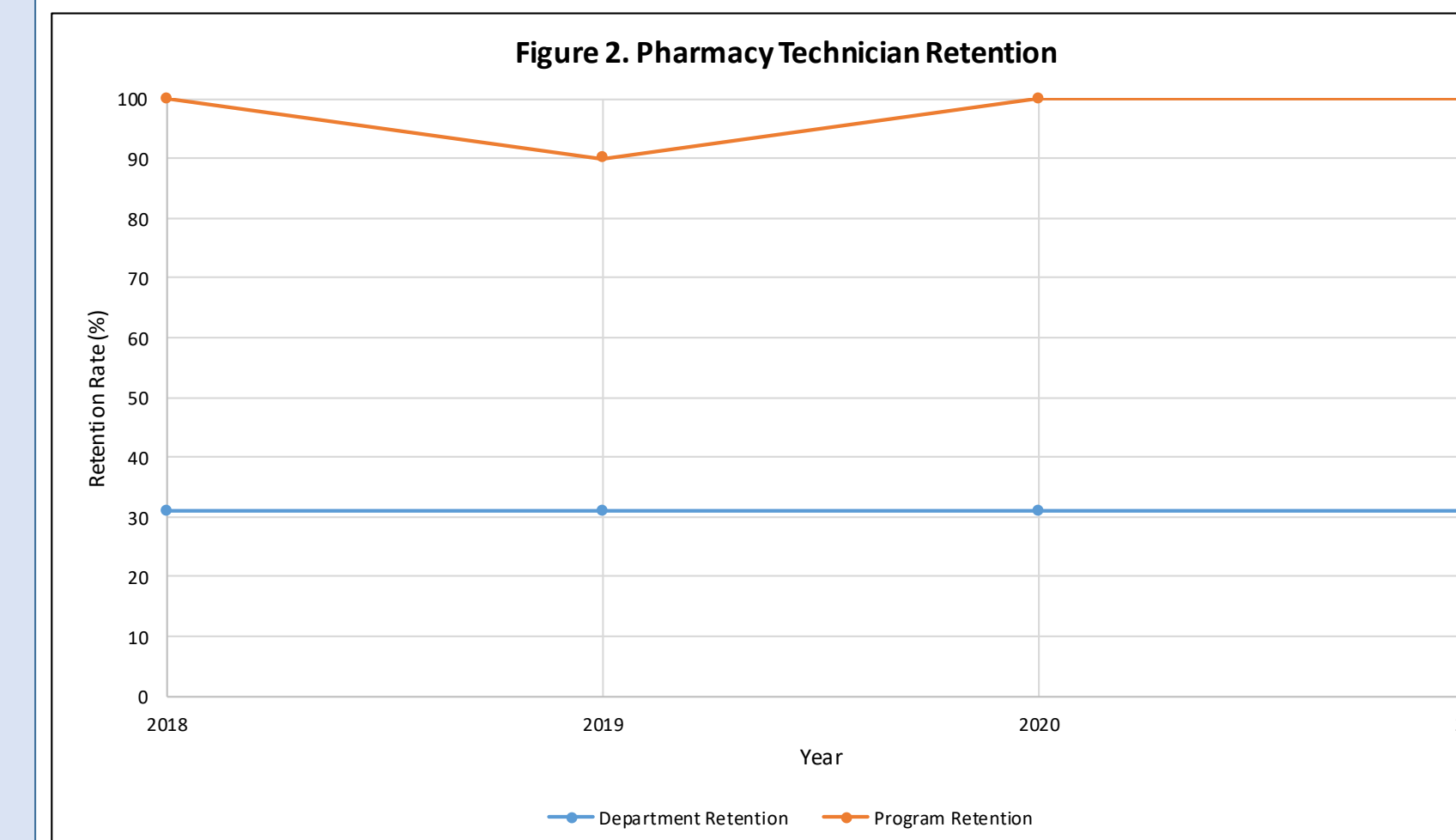
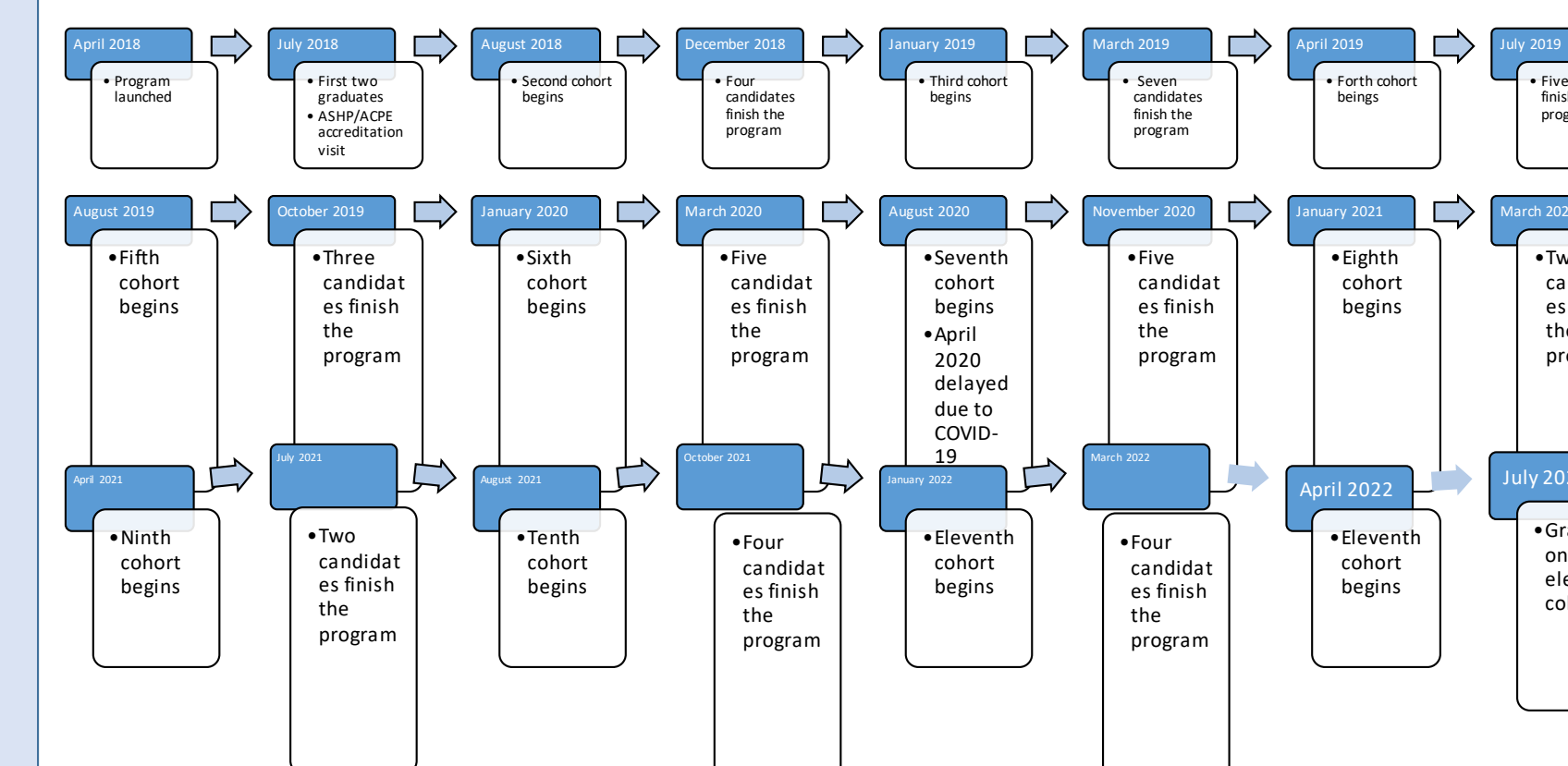


Figure 3. Program Success:



### Discussion / Conclusion

#### Significance of Program

- Need for standardized pharmacy technician training is well known
- Important solution to solving current workforce challenges
- Alignment with professional statements
- Consistent source of pharmacy technicians for our health system

#### Conclusion

- Our program has produced graduates who are equipped to gain certification through PTCB
- Pharmacy Technicians who completed the program have higher retention rates
- Program ensures continuity and uniformity of training

### Acknowledgements

Duke University Health System Department of Pharmacy

Bryan E. Yourich, Pharm.D.

Mary Martin, M.P.A., FACHE

Stephen F. Eckel, Pharm.D., M.H.A.

### References

1. Bureau of Labor Statistics. Occupational outlook handbook, healthcare, pharmacy technicians. <https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm> (accessed 2022 Mar 7).
2. Pedersen CA, Schneider PJ, Ganio MC, et al. ASHP national survey of pharmacy practice in hospital settings: Monitoring and patient education-2018. *Am J Health-Syst Pharm.* 2019;76(14):1038-1058.
3. Schneider PJ, Pedersen CA, Ganio MC, Scheckelhoff DJ. ASHP national survey of pharmacy practice in hospital settings: Workforce-2018. *Am J Health-Syst Pharm.* 2019;76(15):1127-1141.
4. Schultz JM, Jeter CK, Keresztes JM et al. ASHP statement on the roles of pharmacy technicians. *Am J Health-Syst Pharm.* 2016;73:928-30.
5. Manasse HR. Ensuring the competence of pharmacy technicians. *Am J Health-Syst Pharm.* 2007;64(8):816.
6. Bush PW. Caring for patients and frontline pharmacy staff. *Am J Health-Syst Pharm.* 2017;74(16):1267-70.
7. American Society of Health-System Pharmacists. ASHP's surveys shed light on pharmacy technician shortage; new technician training program launching soon. [https://www.ashp.org/about-ashp/ceo-blogs/2022-2021-blogs/ashps-surveys-shed-light-on-pharmacy-technician-shortage-new-technician-training-program-launching?utm\\_term=&utm\\_campaign=Performance%20Max-Recruitment-1-00-4801-60000&utm\\_source=adwords&utm\\_medium=ppc&hsa\\_acc=3985934627&hsa\\_cam=17288510113&hsa\\_grp=&hsa\\_ad=&hsa\\_src=x&hsa\\_tgt=&hsa\\_kw=&hsa\\_mt=&hsa\\_net=adwords&hsa\\_ver=3&gclid=Cj0KCKjwUjXBhCFARIsAOSAKqBIZi5IE9-nfchmiEhZGerLWqPMZMuxj4yeC6aYQWzI8qkFTLm440aAqfNEALw\\_wcB&loginreturnUrl=SSOCheckOnly](https://www.ashp.org/about-ashp/ceo-blogs/2022-2021-blogs/ashps-surveys-shed-light-on-pharmacy-technician-shortage-new-technician-training-program-launching?utm_term=&utm_campaign=Performance%20Max-Recruitment-1-00-4801-60000&utm_source=adwords&utm_medium=ppc&hsa_acc=3985934627&hsa_cam=17288510113&hsa_grp=&hsa_ad=&hsa_src=x&hsa_tgt=&hsa_kw=&hsa_mt=&hsa_net=adwords&hsa_ver=3&gclid=Cj0KCKjwUjXBhCFARIsAOSAKqBIZi5IE9-nfchmiEhZGerLWqPMZMuxj4yeC6aYQWzI8qkFTLm440aAqfNEALw_wcB&loginreturnUrl=SSOCheckOnly) (access 2022 May 3).
8. Traynor K. Pharmacy directors say technicians are valuable investment. *Am J Health-Syst Pharm.* 2017;74(10):630-2.
9. Manasse HR Jr, Menighan TE. Single standard for education, training, and certification of pharmacy technicians. *Am J Health-Syst Pharm.* 2010;67(5):348-9.
10. Manasse HR, Menighan TE. Pharmacy technician education, training, and certification: call for a single national standard and public accountability. *Am J Health-Syst Pharm.* 2011;68(10):869-70.
11. DiPiro JT, Carmichael JM, Johnson VB, et al. ASHP Foundation pharmacy forecast 2022: strategic planning guidance for pharmacy departments in hospitals and health systems. *Am J Health-Syst Pharm.* 2022;79(2):23-51.
12. ASHP Practice Advancement Initiative 2030: New recommendations for advancing pharmacy practice in health systems. *Am J Health-Syst Pharm.* 2020;77(2):113-121.
13. Mattingly AN. Entry-level practice requirements of pharmacy technicians across the United States: A review. *Am J Health-Syst Pharm.* 2018;75(14):1057-1063.
14. Anderson DC, Draime JA, Anderson TS. Description and comparison of pharmacy technician training programs in the United States. *J Am Pharm Assoc (2003).* 2016;56(3):231-6.
15. American Society of Health-System Pharmacists. Need for uniform national standards for the education and training of pharmacy technicians. *Am J Health-Syst Pharm.* 2004;61(11):1162-6.
16. American Society of Health-System Pharmacists. White paper on pharmacy technicians 2002: needed changes can no longer wait. *Am J Health-Syst Pharm.* 2003;60(11):37-51.